

many *Agrodiaetus damon* Schiff. and a few *Meleagris daphnis*. In a meadow just above we got one female *damon* and many more males.

Twentieth and 21st July we devoted to a search for *Erebia aethiopellus* Hffmog. The first day we went to the Col d'Izoard about 18 Km. south east of Briançon, and on the second to the Col d'Allos 104 Km. to the south. Above the tree line on both passes there were a few of a small *Erebia* on grass at the edge of screes which appeared to me to be *Erebia gorge* Hübn. Fortunately I took a small series and on returning to England all but one were identified as *E. aethiopellus* which I thought I had failed to find. Other insects at this altitude (5000-6000 feet) included *Colias phiconome* Esp., *Ceneis aello* Hübn. (one only on Col. d'Izoard), a few *E. pluto* de Pr. on the screes, *E. cassioides* Hohenwarth, *E. euryale*, *E. alberganua*, *E. epiphron* Knoch., *E. gorge*, *Albulina orbitulus* de Pr. (one only on Col. d'Allos), worn *Eumedonia chiron* Rott. and some *Mellicta varia* Meyer Dür. both on the Col d'Allos.

On 22nd July we made an expedition to the Col de Mont Cenis to try for *E. montanus* de Pr. at a spot where I had seen a few in 1966. We failed to find it, I suppose it was too early. *P. eros* was not uncommon, and we took a female *E. pluto* some way from any scree.

On 23rd July, our last day at Briançon, we went up the Argentière valley and worked some of the juniper-covered slopes above Ailefroide. Here our most interesting captures were a few *Aricia nicias* Meig., a new insect to me.

On 24th July we started back for the Channel in rather dull weather, reaching Lydd on 27th July.

We had, on the whole, a very successful trip, and considering the generally poor summer experienced this year, we lost very few days from lack of sun. The student riots and strikes in May seemed to have frightened most foreign tourists and we had the country very much to ourselves (apart from the French!). This was nice for us but most unprofitable to all the hoteliers.

I am much indebted to Mr. R. F. Bretherton for his help in advising on localities in the Massif Centrale for *E. ottomana*, *E. sudetica* and *C. titania*.

Castlesteads, Brampton, Cumberland. 30.x.1968.

Isle of Canna Report for 1968

By J. L. CAMPBELL

The season opened with a severe blizzard on April 2, producing snow three or four inches deep, with much drifting. The moth trap could not go into action until April 9; between then and April 17, when I had to leave the island for five weeks, it produced the usual spring species, *Dasypolia templi* Thunbg., *Cerastis rubricosa* Schiff, *Orthosia gothica* L., *O. stabilis* Schiff., *O. incerta* Hufn., *Xylena vetusta* Hb., *Xylocampa areola* Esp., *Earophila badiata* Schiff. and *Nyssia zonaria* Schiff.

From the 20th of May the summer was the most glorious anyone in the Hebrides could remember for sustained hot calm sunny weather—a fact which the B.B.C. weather reporters appeared to be most reluctant to admit until a state of actual drought had been reached in mid-August. I returned to Canna on May 22. There were brief spells of rain at the

beginning and end of June, which itself was a very fine month. From July 5 to August 17 there was the longest spell of sustained fine hot weather in my Hebridean experience, which goes back to 1933. There was then a spell of rain and wind, but fine weather was re-established on August 23 and lasted into the first week of September. The weather did not really break until September 27. There was again a fine spell in October, and November was unusually dry, but I was away again for part of these months.

One consequence of this glorious summer was record crops of apples, pears, raspberries, black currants, brambles and rowan berries. Another was record catches in the moth trap, and a most welcome revival in the number of the island's butterflies, which had been in decline for the last seven or eight years.

All the species of local butterflies benefited by this weather, and some of them became markedly more numerous. This applies to *Aglaia urticae* L., seen in numbers again at the east end of the island after having become very rare indeed; *Argynnis aglaia* L., seen flying over low ground for the first time for many years; *Satyrus semele* L., *Maniola jurtina* L. and *Polyommatus icarus* Rott. *Pieris brassicae* L. and *P. napi* L. the former reinforced by immigrants, became abundant, especially over oats and rye fields where charlock was growing; this was later stripped by *brassicae* larvae. All these seven species, and *Coenonympha pamphilus* L., were seen flying together in the Haligary ravine, now permanently fenced and with willows and alders planted along its stream, on July 13; it is not often that one can see eight kinds of butterflies flying together in the Hebrides. I was absent during the emergence period of *Callophrys rubi* L., but was able to check the presence of *Argynnis selene* Schiff. in its very restricted colony here, first discovered by Dr. Michael Harper, on June 15.

The re-appearance of *Pararge aegeria* L. on Canna for the first time for 17 years has already been described (*Ent. Record*, 80: 295).

In spite of these favourable conditions, there was no sign of any re-appearance of *Nymphalis io* L., which has not been seen here since the autumn of 1961, after having been observed on the island more or less continuously from 1939.

Migrants.—Neither *Vanessa cardui* L. nor *V. atalanta* L. was observed during the early part of the season, but on August 5 full grown larvae of the former were found at the east end of the island on thistles in a rye field now protected by a shelter belt of willows, alders, spruces and Austrian pines that was planted in 1950, and it was evident that a good many larvae had fed there. The first adults appeared on August 16, and the butterfly was to be seen around this spot on fine days until September 18. *Cardui* was commoner this year than any time since 1952.

Atalanta on the other hand was not seen here until August 31 between which day and September 28 it was noticed 10 times.

Herse convolvuli L., one on September 12 in the m.v. trap (see *Record*, 80: 294).

Peridroma saucia Hb., one in the m.v. trap on September 4, and one on December 11!

Plusia gamma L., first seen on July 25; continuously September 4-27. Sixty-seven taken in the trap in all.

Nomophila noctuella Schiff., one only, in the trap on July 27.

Moths.—11,173 moths were taken in the trap, comprising approximately 160 species. This beats the previous highest figures, those for 1966, when the total was 10,625 moths of approximately 158 species. As is usually the case, a substantial proportion of these moths consisted of Large Yellow Underwings *Triphaena pronuba* L.

On August 27 there was a record catch of 828 moths, of which 441 were *pronuba* and 201 *Hydraecia micacea* Esp. This year *pronuba* numbered 3,246, or 29 per cent. of the total catch. Indeed nearly four-fifths of the catch was made up of 20 common species: *pronuba* 3,246, *Apamea monoglypha* Hufn. 1,063, *micacea* 852, *Diatarxia oleracea* L. (alleged by 'South' not to be found in the Hebrides)—continuously from May 26 to August 11—598, *Triphaena ianthina* Schiff. 551, *Apamea secalis* L. 411, *Amathes glareosa* Esp. 221, *Spilosoma menthastri* Schiff.= *S. lubricipeda* Auct. Nich. L. 182, *Cerapteryx graminis* L. 181, *Plusia chrysitis* L. 174, *P. pulchrina* Haw. 173, *Omphalosceles lunosa* Haw., 149, *Amaphes xanthographa* Schiff. 141, *Alcis repandata* L. 135, *Hada dentina* Esp. 116, *Dysstroma citrata* L. 106, *Hadena consperso* Schiff. 105, *Abrostola tripartita* Hufn.= *triplasia* L. 97, *Smerinthus populi* L. 94, *Dysstroma truncata* Hufn. 94, a total of 3,689 or 77.76 per cent.

The poplar hawk moth has become much commoner here in recent years, presumably as a consequence of the widespread planting of willows and black Italian poplar that has been done here since 1949. For the last three years the numbers taken in the trap have been 93, 77, and 94; the highest previous figure was 15 in 1964.

New species added to the Canna collection this year were:—*Eclipoptera silaceata* Schiff., June 2; *Graphiphora augur* Fab., single specimens on July 16 and 18; and *Griposia aprilina* L., a very great surprise, on September 24. I believe that *silaceata* was taken elsewhere in the Highlands and Islands for the first time this summer.

Other species of local interest:—*Lampra fimbria* L. was taken in the trap for the first time since 1955, three specimens, one on August 11 and two on September 14; *Colocasia coryli* L. for the first time since 1961 and only the second time in all; *Bombycia viminalis* Fab. for only the third time (previously 1958 and 1966). Comparatively good numbers were caught of *Hadena caesia* Schiff. (16), *Folia nebulosa* Hufn. (9) and *Anaplectoides prasina* Schiff. (6). *Lophopteryx camelina* L. with its highest number (21) also reflected the growth of poplars planted here. Six specimens of *Celama confusalis* H.-S., were taken, and five of *Ellipia prosapiaria* L. This species seems to have established itself in consequence of the establishment of new plantations; it was taken for the first time in 1966, and again in 1967.

In spite of the favourable conditions, some moths which might have been expected to occur during such a good summer were either very scarce or absent. These include *Arctia caja* L. (only 4), *Euxoa tritici* L. (2), *E. obelisca* Schiff. (4) and *Amphipyra tragopoginis* L. (1); while *Euxoa cursoria* Hufn., *Agrotis vestigialis* Hufn., *Actebia praecox* L., *Phalaema typica* L., *Leucania pallens* L., *C. trapezina* L., and *Agrochola lota* L. were certainly absent.

As the hot dry summer wore on, the grassy basaltic terraces of Canna dried up and from the sea the island began to appear like an island in the Aegean. This may have affected adversely the Burnets and other lepidoptera inhabiting the southern cliff faces. Moths tended

to appear in the trap early and specimens to be smaller than usual. The drought might have become serious if the coming of rain in August had been postponed for another week or two. It will certainly be a long time before the summer of 1968 is forgotten in the Hebrides.

Georgian Bay, Lake Huron, Canada July-August 1967: August-September 1968

By A. G. M. BATTEN, F.R.E.S., and Mrs A. M. BATTEN

Most of our entomological excursions are, of necessity, to places in the Sterling area—Jamaica twice, Malaysia twice, India once, Hong Kong once and, previously, on the occasion of business visits, South Africa twice. However, since our son lives in Canada and we have grandchildren there we do visit that dollar country each year. For many years these visits have been at Christmas time, but, since retirement, we have felt that the summer months permit of rather more activity so, for the last two years we have made our visits in July and August. The exact periods of these two visits were from the 16th July until 23rd August 1967 and from 8th August until 12th September 1968.

Our son lives in Willowdale, a suburb of Toronto, some 15 miles to the north of the city. Cities are not usually satisfactory collecting grounds but in this suburb there exist what our Canadian friends call 'ravines'. These are the watercourses of small streams. Often the land around them is so uneven, of low level and so irregular that they are not disturbed but are allowed to grow wild. Except for the local children who delight in them and the use of an occasional footpath, few people visit them. They tend to abound with rough grasses and golden rod (a weed in Canada and universally abhorred) other wild plants, including milkweed, small shrubs and, sometimes, trees. The insect population of these ravines must be considerable although, as yet, we ourselves have not been very successful in collecting there.

Our son has a cottage at, or rather near, Honey Harbour in Georgian Bay a little more than 100 miles north of Toronto. Georgian Bay comprises the south-eastern part of Lake Huron. The Bay was until recently said to have some 30,000 islands many of which are small and uninhabited. This number has recently been increased to 50,000 by the inclusion, as islands, of all the pieces of rock which, from time to time, project above the water. The cottage is situated on the shore line about 5 miles north of Honey Harbour—a well known centre for boating in the summer and ice yachting in the winter. There are no roads or shops nearer than 5 miles to the cottage. Access is only by water. Power is, however, supplied by the "Hydro". The country is rocky, none of it can be called flat and north of Honey Harbour cultivation is quite impossible on the lake shores which are, for the most part, clad only by conifers, scrub oaks and juniper with an occasional maple. There is a little grass among the vast rocks but there are many small plants among the prevailing conifers. Small patches of milkweed are sometimes to be seen.

The altitude is that of the Great Lakes generally, just under 600 feet above sea level. The Lakes have to be seen for it to be realised how vast they are. They give the appearance as of the sea and the wind generally produces waves although there are no tides. Huron is 200 miles in length